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SPCC PLAN
for
GO-JO INDUSTRIES

NOTE: In Case of a Spill Event, Turn to Chapter 5 !!!

by:
SNELL ENVIRONMENTAL GROUP, INC.
134 W. Center Street
Akron, Ohio 44308

April 1981

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CHAPTER 1.0

1.0 SUMMARY AND RECOMMENDATIONS

1.1 Summary

This report presents results of the site evaluation of Go-Jo Industries' new production facilities in Northampton Township. Go-Jo is in the process of relocating and expanding its hand cleaner production operations from the present Cuyahoga Street location to the facility previously occupied by Massey-Ferguson, Inc., at 3783 Akron-Cleveland Rd. (State Rt. 8). Go-Jo has also re-located its body filler production at this location. The site evaluation performed by Snell Environmental Group, Inc., involved recommendations for spill containment structures and the preparation of a Spill Prevention, Control and Countermeasure (SPCC) Plan. The SPCC Plan plus site modifications, with cost estimates where applicable, are included in this report.

1.2 Recommendations

The Go-Jo SPCC Plan is designed to be readily managed by Go-Jo personnel and includes minor physical modifications to existing facilities. To fully implement the plan, the following actions are recommended:

Phase I

- (1) Design and construct spill control structures as recommended at the North side containment area.
- (2) Establish record keeping and inspection procedures to lessen the likelihood of a spill emergency.
- (3) Establish tank truck unloading procedures as recommended.
- (4) Incorporate spill response management mechanisms into normal plant operation procedures.
- (5) Set up a training and orientation program to familiarize all employees with spill control methods and emergency spill response mechanisms.

Phase II

- (6) Design and construction resin storage and containment on the south side.

Phase III

- (7) Design and construct internal tank storage and containment on the south side.

Phase IV

- (8) Design and construct truck unloading containment area on the south side with south side drive resurfacing this year.

CHAPTER 2.0

2.0 INTRODUCTION

2.1 Authorization

Snell Environmental Group, Inc., was authorized to prepare spill control plans and procedures by Go-Jo Industries' purchase orders dated August 13, 1980, and September 24, 1980.

2.2 Scope of Services

The scope of engineering services is summarized as follows:

- (1) Produce a Spill Prevention, Control and Countermeasure Plan for the Stoddard Solvent storage tanks (north side) and raw materials storage area (south side) in accordance with EPA regulations.
- (2) Prepare recommendations for spill prevention structures and equipment at these locations.

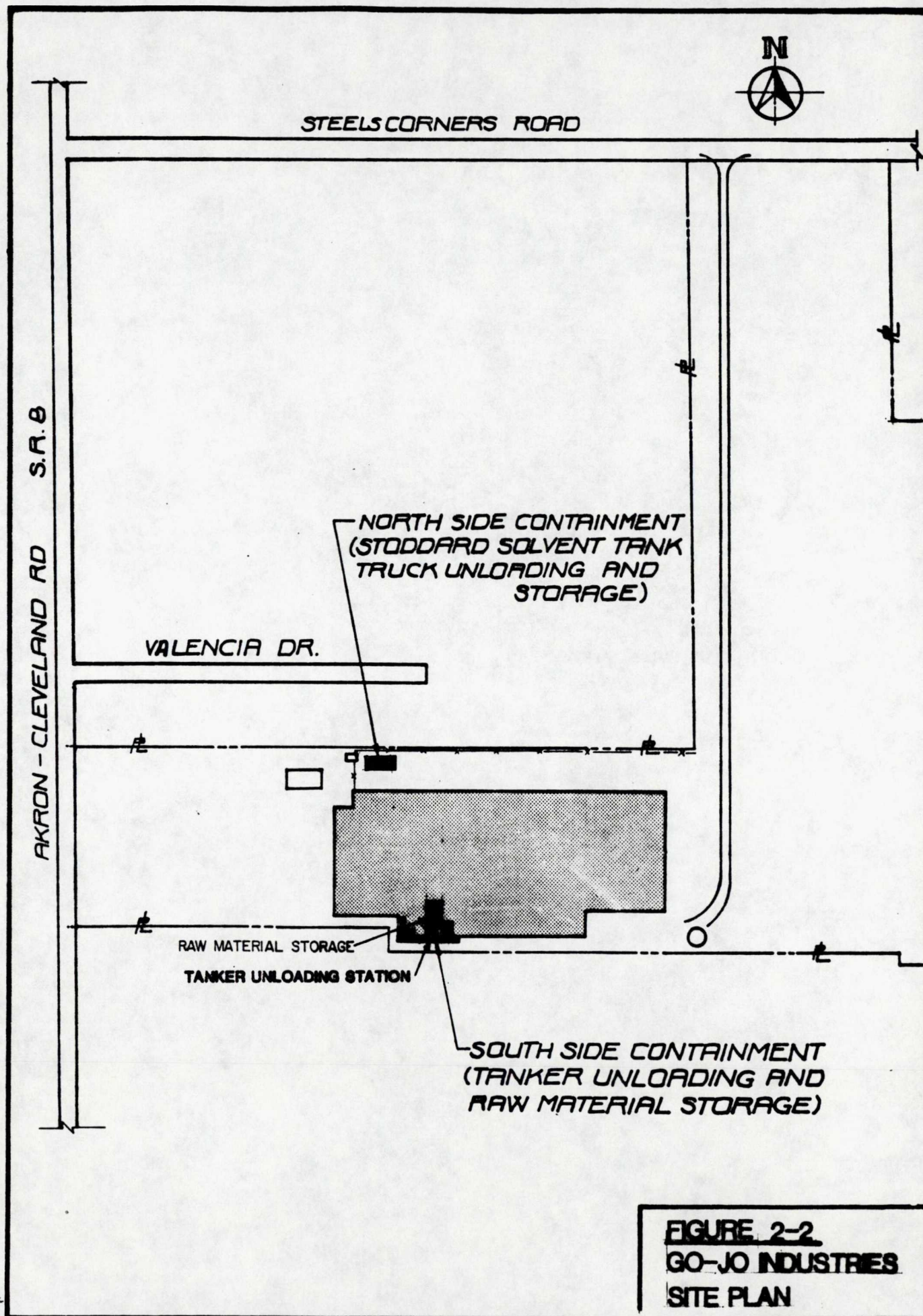
2.3 Description of Study Area

The new Go-Jo production facility is located on S.R. 8 in Northampton Township as indicated in Figure 2-1, Flood Prone Area Map. The site is located outside of the flood plain of Mud Brook which receives storm runoff from the site and drains west to the Cuyahoga River.

The spill control areas of concern are indicated in Figure 2-2. The north side Stoddard Solvent (mineral spirits) area includes a tank truck unloading station and eight buried storage tanks. The south side raw materials storage area includes a tank truck unloading station at the south wall of the building with the storage tanks located inside the building in an above ground containment area.



FIGURE 2-1
LOCATION AND FLOOD
PRONE AREA MAP



CHAPTER 3.0

3.0 DESIGN AND OPERATING INFORMATION

3.1 North Side Unloading and Storage Area

3.1.1 Design and Facility Drainage

The storage area has eight Stoddard Solvent tanks with a volume of 20,000 gallons each. These tanks are completely buried in a pea gravel bed in a tight clay pit. The pea gravel is capped with a 0.005" sheet of polyethylene and a layer of clay to prevent excessive surface water from entering the pit. Figure 3-1 presents a plan view of the unloading and storage area.

The tank fill ports are at grade and vent-overflow pipes extend twelve feet above the tanks. The tanks, discharge lines and return lines are coated for corrosion protection and all pipe joints are wrapped for extra protection.

The tank pit is dewatered by two sumps located between the second and third tank in from either end of the storage area. Submersible pumps discharge to the storm drain line located between the storage area and the building as indicated in Figure 3-1. Surface runoff from the tank truck unloading pad and storage area also drains to this storm sewer.

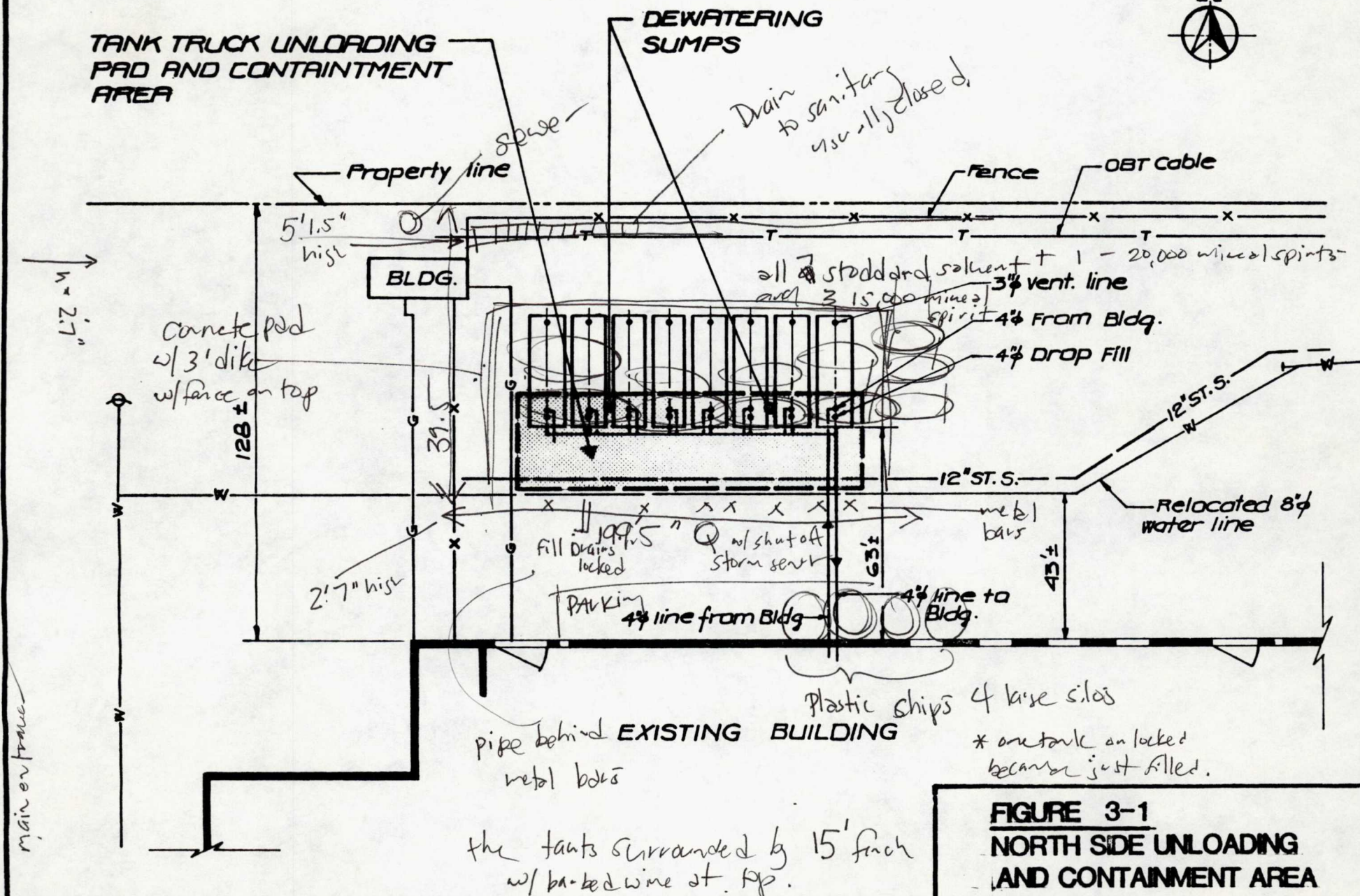
3.1.2 Operations and Inspection

Stoddard Solvent is transferred to production areas by pumps located inside the building and returned through separate lines. Records shall be kept current for volumes of solvent consumed, delivered, etc. along with available capacity in each tank. Visual inspection shall be performed daily, or more frequently as required, for spill detection at the dewatering sumps and status of return line valves during transfer and return operations. Inspection shall include dipstick measurements before and after solvent delivery operations, and as often as required to maintain current records of available tank capacity and material usage. Tank truck unloading operations shall be supervised by authorized plant personnel as detailed in Appendix A.

Spills at the tank truck unloading pad and containment area will only occur from overfilling or delivery hose leakage during unloading operations. Therefore, the solvent delivery record should include the following observations during any unloading operation:

- (1) Date and time of delivery
- (2) Tank or tanks filled (tanks should be labeled 1-8 in a conspicuous location)
- (3) Available volume in each tank according to dipstick measurement
- (4) Volume delivered to each tank according to dipstick measurement
- (5) Estimated volume of any overfill or hose leakage
- (6) Action taken, if necessary (see Spill Alert Procedures, Chapter 5.0)
- (7) Missing materials, etc. (absorbents, wheel chocks, dipsticks, etc.)
- (8) Receiving Personnel's signature.

A more thorough inspection of the containment/storage area should be performed quarterly including leak surveillance of the tanks, pipelines and pumps, plus pressure testing of all inaccessible structures if warranted by a suspected leak or records of apparent material losses. Appendix B includes examples of inspection forms to be used by plant personnel.



3.2 South Side Unloading and Storage Area

3.2.1 Design and Facility Drainage

The tank storage area is located in a curbed 60 x 120 foot area inside the building as indicated in Figure 3-2. The raw materials listed in Table 3-1 are stored in various types of tanks which may be floor mounted or supported by concrete and metal pedestals and saddles. Curbing will provide secondary containment for the largest possible leak or accidental spill in the area, which would originate at a 14,000 gallon Tall Oil tank. The containment area also contains separate fill lines, transfer lines and pumps for each different material handled. Gauging of the storage tanks is accomplished through the use of dipsticks for those tanks not equipped with sight glasses.

3 ft. containment wall.

catch basin would take spillage and (large amount) take out back to retention pond.

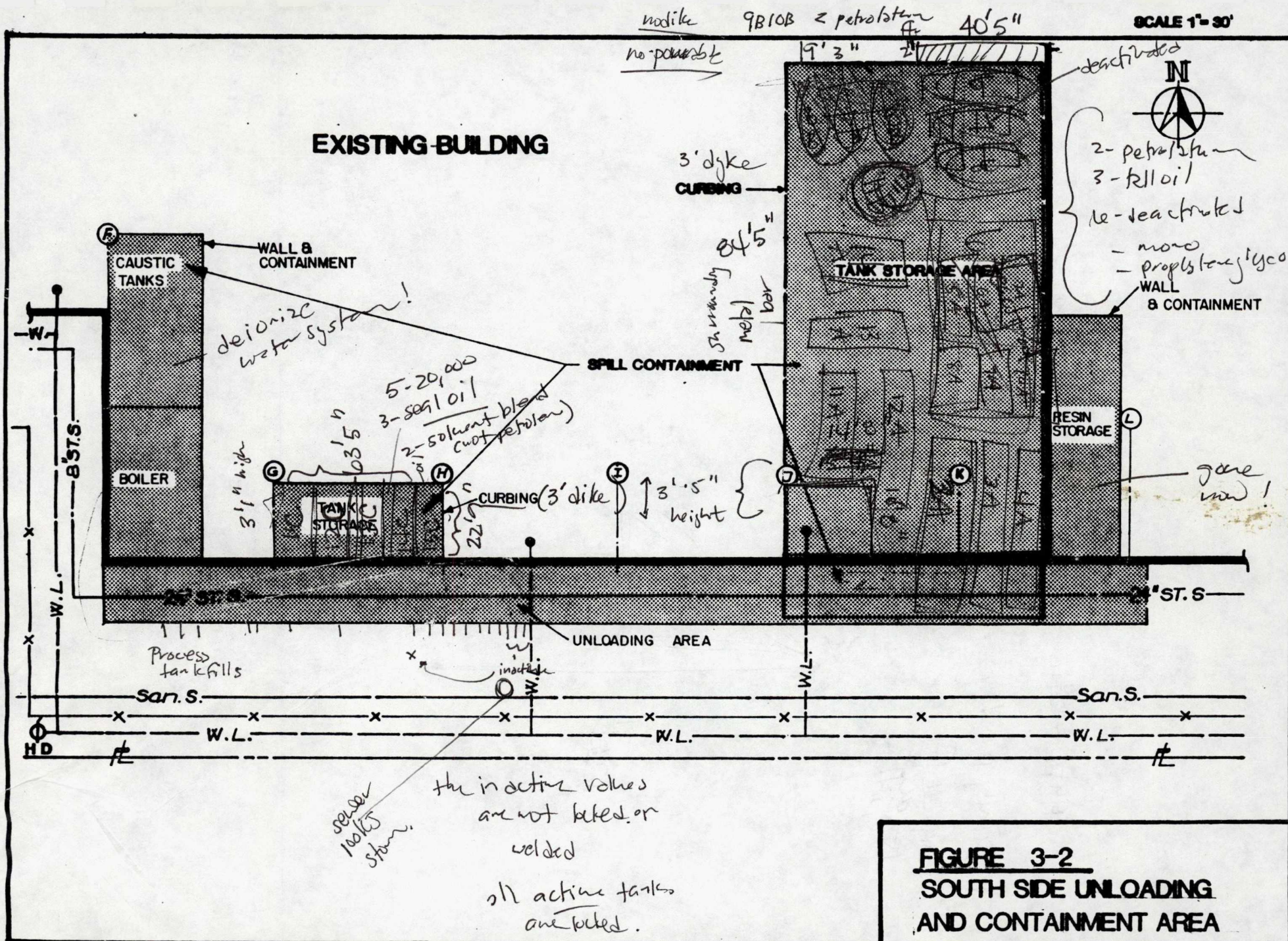
Tank trucks deliver raw materials through fill ports located on the exterior south building wall. An asphalt drive extends the length of the building with enough clearance for two-way truck traffic. A turnaround has been provided at the southwest corner of the building so that access to the unloading station is possible from either direction. Surface runoff from the drive drains to inlets on the storm sewer which flows east parallel to the building.

TABLE 3-1

South Side Raw Material Storage - internal (parallel to) Alside	
1. Detergent	
2. Diisopropanolamine 85%	(out of service & -) monoethanolamine changed to another material
3. Mineral Seal Oil	
4. Monoethanolamine	
5. Oleic Acid	- changed to ?
6. Petrolatum	
7. Propylene Glycol	
8. Tall Oil	
9. Triisopropanolamine 98%	- changed to something else
10. Polyester Resins	- remained from process; gone from site.
11. Caustic Soda	- processing vessel - used for storage.

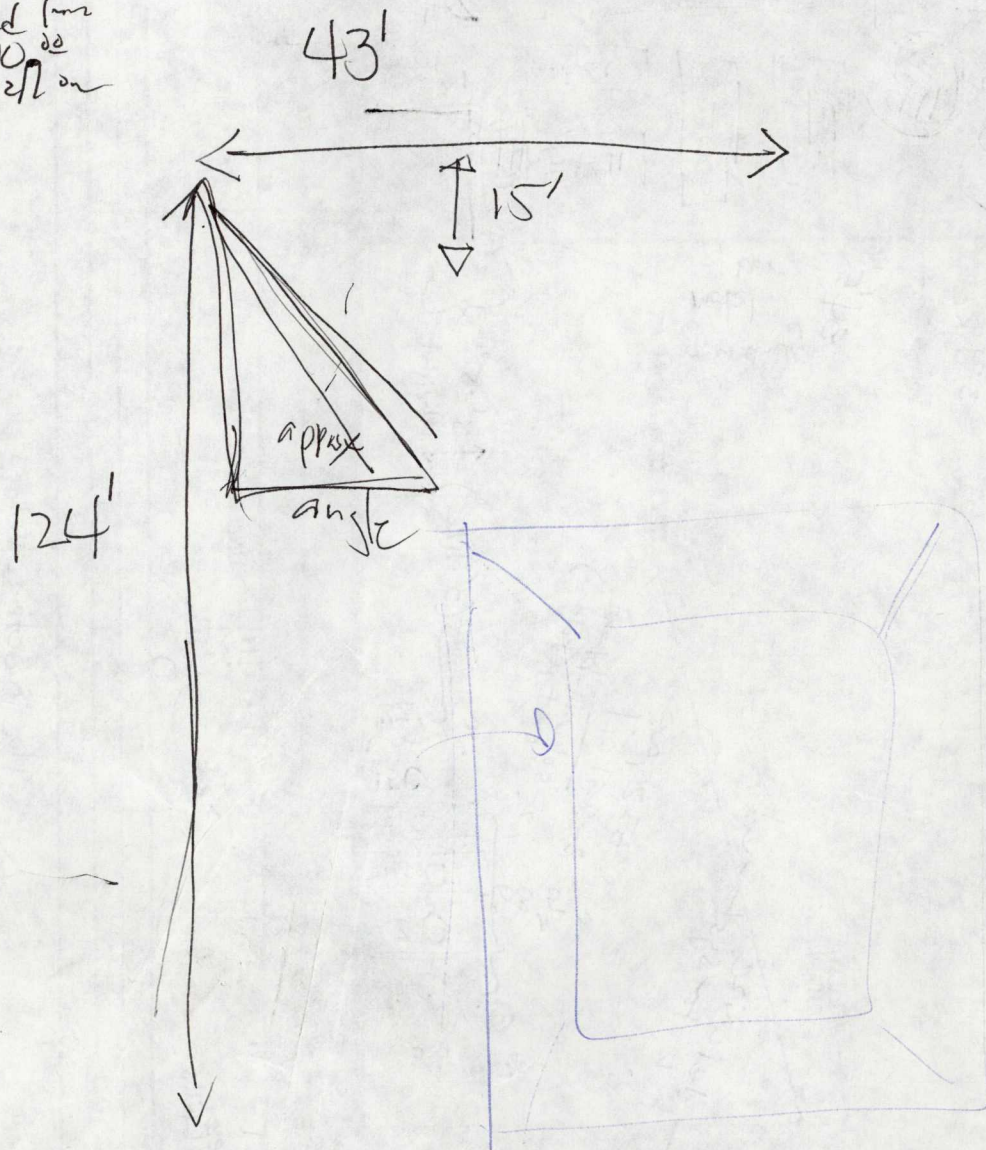
3.2.2 Operations and Inspection

In plant transfer operations between storage and production areas involve flow through pipe racks in areas where any leaks would be quickly detected. All transfer operations should be accompanied by maintaining current records of available storage capacity for reference during tank truck unloading operations. Inspection of the storage area may be flexible because any major leak or spill would be totally contained, and the drains are capped in the curbed containment area. Inspection should necessarily include tank gauging as often as necessary to maintain current storage status records. Quarterly surveillance of all tanks, pumps and transfer lines will provide an adequate record of potential leakage problems which will require maintenance.



automatic system once floor drains
are breached.

retaining pond
designed for
150,000 gal on



The tank truck unloading station has the highest potential for a spill emergency. Without modifications to the unloading pad, a large spill could reach the storm sewer. Small spills could be contained with the application of absorbent materials.

In addition to the tank truck unloading procedures outlined for the North Side containment area, plant personnel will also be responsible for verifying delivery hose connections to the proper fill lines and correct valve positions to shut off the line in case of check valve leakage and to re-install the caps.

External fill ports and the truck pad area should be inspected daily to detect any leakage or spills with corrective action initiated as necessary.

CHAPTER 4.0

4.0 SPILL OCCURRENCE, CONTAINMENT AND CLEANUP

4.1 North Side Containment Area

Any unloading spills or hose leaks would be totally contained at the Stoddard Solvent area. Such accidents would be detected immediately by the truck driver and the Go-Jo representative who would be at the storage area during unloading operations. Small spills would be covered with absorbent material and removed with materials stored nearby. Large spills would require spill removal equipment from an outside contractor capable of handling larger volume emergencies. Internal Spill Alert action would also proceed as soon as possible.

In the event of a storage tank rupture, discharge of solvent to the storm sewer could possibly go undetected depending upon the volume involved and time lag between dewatering sump inspections. In this case, spill notification procedures (Chapter 5.0) and corrective action should be initiated immediately. Minor modifications presented in Chapter 6.0 would eliminate this type of material loss.

Significant losses through the tank pit are unlikely because leak detection and corrective actions would occur long before seepage through the clay to groundwater would become a problem.

do have boom ; oil dry material

4.2 South Side Containment Area

As indicated in Chapter 3.0, any overfill during unloading operations or storage tank and pipeline failures would be totally contained in the curbed storage area. Such occurrences would be detected immediately by personnel at the site who would initiate corrective action. Cleanup operations would involve outside contractors for large volume spills or in plant application of absorbents and portable pumps, equipment, etc. for small scale spills.

Small spills at the unloading station can be contained by application of absorbent materials with removal to drums or suitable containers by plant personnel. Large scale spills would involve external Spill Alert procedures because of the likelihood of drainage to the storm sewer in the truck drive. Modifications to the unloading area described in Chapter 6.0 will provide collection and containment of any potential large volume spills in the interior tank storage containment area.

4.3 General Spill Cleanup Requirements

For purposes of small scale leaks or spills which can be handled by in plant personnel, both storage and tank truck unloading stations should be equipped with a supply of basic cleanup materials. This should include absorbent materials, squeegees, shovels, portable pumps and suitable waste disposal containers, plus personnel protective apparel (boots, gloves, etc.).

CHAPTER 5.0

5.0 SPILL CONTROL AND NOTIFICATION

employees associated w/ spill program
- mixing department; knowledgeable
- receiving

5.1 Notification Information

The employee or person detecting a spill or leak should take the following actions:

- procedure to keep closed.
- (1) Close storm drain valves immediately when the spill is discovered in a containment area which drains to the storm sewer.
 - (2) Close tank or pipeline valves or shut off pumps where this is the obvious solution for stopping a leak or spill. This includes instructing tank truck operators to terminate material delivery during unloading operations.
 - (3) Quickly determine the following information before reporting a spill:

- (a) location of leak or spill
- (b) material spilled
- (c) estimated volume lost
- (d) time leak was detected
- (e) assessment of environmental damage (loss to storm sewer, spill on unpaved surface, etc.)
- (f) action taken

* the tanks are on the outside
have no alarm
* tanks are physical in

5.2 Internal Spill Alert Procedure

The person discovering a spill shall immediately report the above information to the following employees designated as Spill Control Coordinators in the following sequence:

- (1) Department Manager
- (2) Maintenance Superintendent
- (3) Plant Engineer

Plant
operates: 24 hrs. 3-shifts
5 days a week;
usually not fully operating on weekends.

The Spill Control Coordinator shall initiate cleanup operations and notify the proper authorities as required and document this in a spill report.

5.3 External Spill Alert Procedure

If the spill reaches any sewer, the Spill Control Coordinator shall immediately notify the Director of Operations or the Vice President of Corporate Development who in turn will initiate notification of the following:

- (1) For spills to the sanitary sewer,
 - (a) Akron Water Pollution Control Station (Per Sewer Connection Agreement) 928-4037
- (2) For spills to any sewer
 - (a) Ohio EPA
Northeast District Office - Twinsburg
1-425-9171
(Section 311 CWA
Part 109)
 - or (b) OEPA - Columbus
1-800-282-0270

(3) For flammable liquid spills to any sewer

(a) Akron Fire Department
375-2101

(b) Northampton Fire Department
923-4222

(4) For spills to storm sewer

(a) U.S. Coast Guard
National Response Center
1-800-424-8802

(Section 311 CWA
Part 109)

5.4 Emergency Spill and Waste Disposal Services

When spills are of such a nature that it cannot be handled by plant personnel, the Spill Control Coordinator may utilize the following services:

Alchemtron Inc.
2516 Train
Cleveland, Ohio
1-241-5775

Pollution Control Services (Coastal Industries, Inc.)
P.O. Box 5555
Akron, Ohio 44313
867-8925 (AFTER 5:00 p.m., 745-5047, 825-0244, 666-5608)

Pollution Recovery Systems
1255 Old River Road
Cleveland, Ohio
1-241-0333 (nights and holidays 1-221-6713 or 1-659-4809)

5.5 Document All Spills in a Spill Report

CHAPTER 6.0

6.0 SPILL CONTAINMENT AREA RECOMMENDATIONS

6.1 North Side Containment Area

The description of spill containment at the Stoddard Solvent unloading and storage area found in previous sections of this report is based on the surface paving and collection trench design shown in Figure 6-1.

Spill containment at the truck pad is accomplished through surface paving, curbing along the south edge of the pad, and approach and exit ramps which rise to the same elevation as the curbing. Any spill or leak on the truck pad drains to the paved collection trench which runs the length of the storage area and is bulkheaded at either end. Paving the surface over the tanks past the fill pipes allows any spills here to also drain to the collection trench.

Storm runoff from the truck pad and ground surface over the tanks also collects in the containment trench which is drained by a connection to the storm sewer. This drain must be valved for containment purposes in this area. The total estimated containment volume is 15,000 gallons, which includes the tank truck capacity plus the runoff volume associated with the 1-yr. 24-hour storm drainage over a 5000 square foot area.

Paving of this surface area is also necessary for preventing a solvent spill from entering the storage tank pit. This allows dewatering sump inspections to indicate the structural integrity of the storage tanks and connected buried pipelines. To prevent a solvent discharge to the storm sewer from the pit dewatering sumps in the event of a tank or pipeline failure, the sumps should discharge to the collection trench with the storm drain valve maintained in a closed position. The containment area can then be drained manually to the storm sewer as required when inspection has verified that no solvent is present in the retained groundwater (or runoff after rainfall events).

6.2 South Side Containment Area

The largest volume to be contained in the storage tank area is 14,000 gallons as indicated in Section 3.2.1. Curbing around the storage area should be at least 4" high to contain this volume, based on open floor space of 5440 square feet in the storage area.

This storage volume may also be utilized for containing a major tank truck spill at the unloading station by providing drainage through the exterior building wall from the truck pad sloped to the building. A representation of this design is shown in Figure 6-2, and will be provided in the next phase of construction when the drive is re-surfaced. By placing the drain to the interior containment area slightly above the truck pad, small volume spills would be completely contained at the unloading station, simplifying cleanup operations.

SCALE 1/8" = 1'-0"

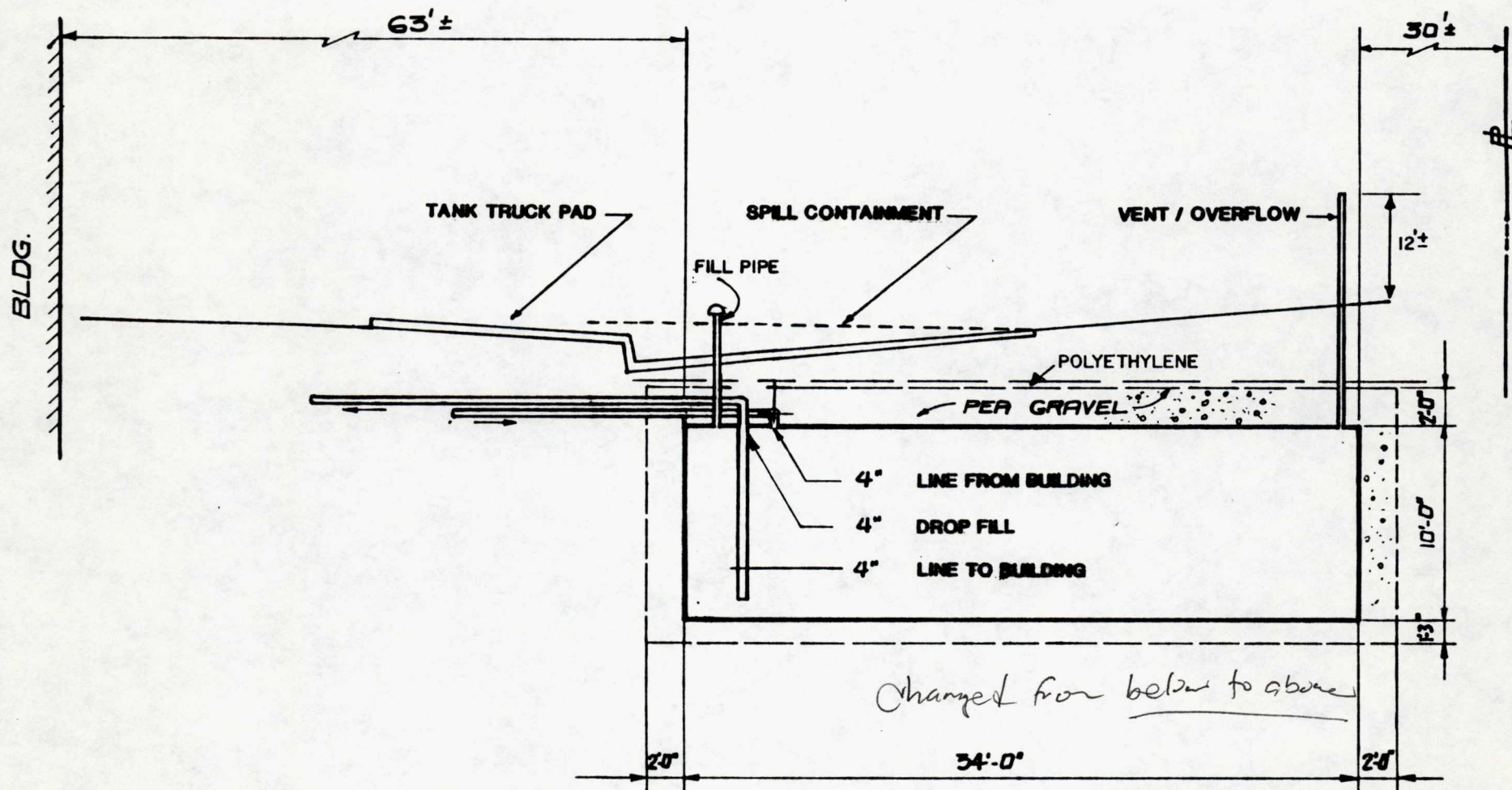


FIGURE 6-1
NORTH SIDE SPILL
CONTAINMENT

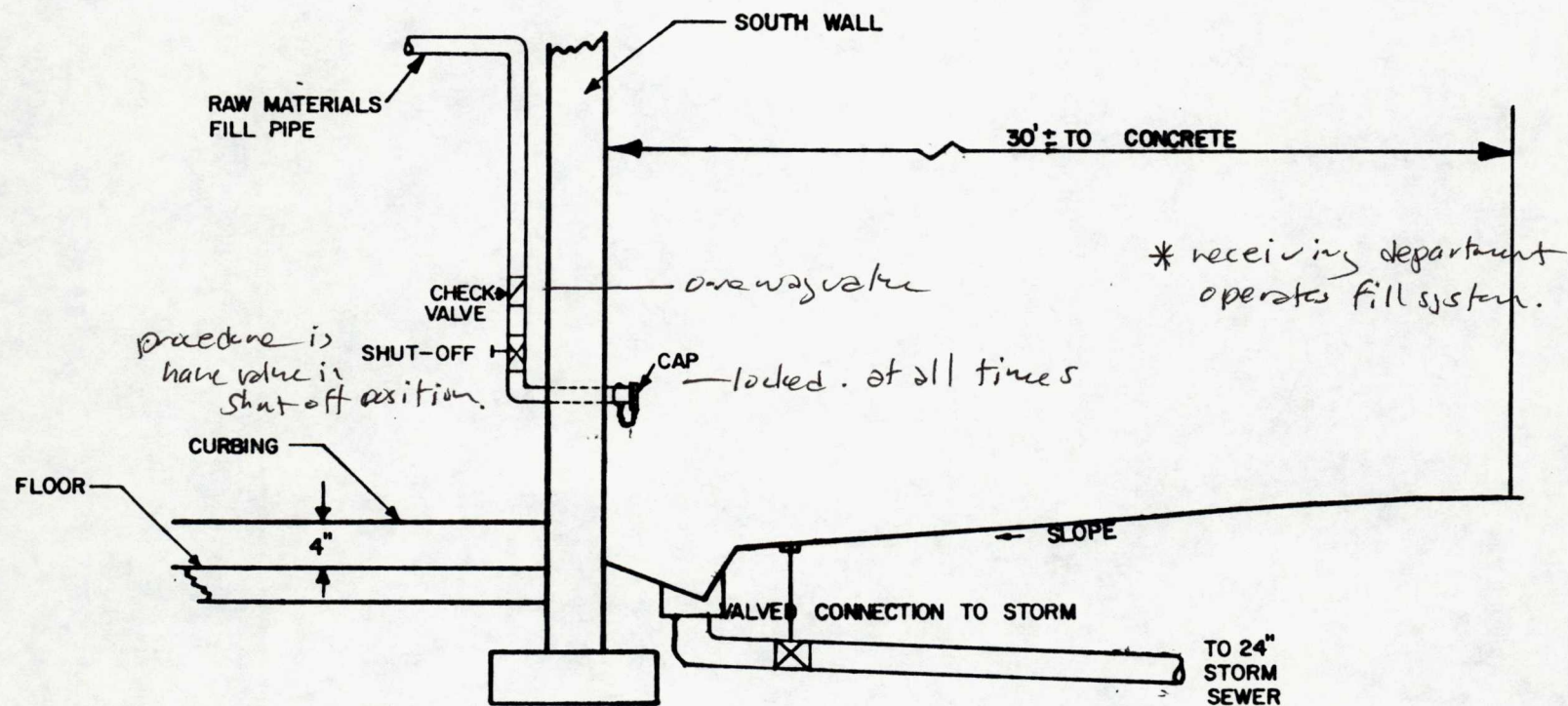


FIGURE 6-2

**VIEW SOUTH SIDE
SPILL CONTAINMENT**

The enclosed unloading area requires a drain connection to the storm sewer, which would be valved for containment purposes. This valve could be maintained in a closed position as at the Stoddard Solvent unloading station, with the area being drained of storm runoff as necessary subject to normal spill inspection procedures.

6.3 Cost Estimates

Table 6-1 presents estimated construction costs which reflect the recommended improvements for the north side and the south side containment areas. Costs presented do not include construction contingencies and nonconstruction costs.

TABLE 6-1

Estimated Construction Costs

(a) North Side Containment

<u>Item</u>	<u>Unit</u>	<u>Quantity</u>	<u>Unit Cost</u>	<u>Total Cost</u>
Curbing	l.f.	100	\$ 5.50	\$ 550.00
Concrete Pad	yd ²	555	30.00	16,650.00
Drain Piping (4")	l.f.	20	30.00	400.00
Drain Valve (4")	ea.	1	200.00	200.00
Drain Grate	ea.	1	130.00	130.00
TOTAL				\$17,930.00

(b) South Side Containment

Curbing	l.f.	260	\$ 5.50	\$ 1,430.00
Asphalt	ton	100	35.00	3,500.00
Drain Piping (4")	l.f.	20	20.00	400.00
Drain Valve (4")	ea.	2	200.00	400.00
Drain Grate	ea.	1	130.00	130.00
TOTAL				\$ 5,860.00

APPENDICES

APPENDIX A

TANK TRUCK UNLOADING PROCEDURE

TANK TRUCK UNLOADING PROCEDURE

The following will be the established tank truck unloading procedure. A copy of this procedure will be issued to tank truck drivers upon entering the facility.

1. Tank truck driver will contact designated plant representative.
2. The designated plant representative will accompany the tank truck driver to the fill-pipe area and will assist in proper spotting of the tank truck.
3. The tank truck driver will block the tank truck wheels to prevent truck movement.
4. The designated plant representative must close containment area storm drain valves or verify that such valves are in the closed position.
5. The designated plant representative will determine and properly record the available tank capacity before hookup between tank truck and fill pipes. The tank truck driver shall be informed of the available tank capacity and confirm the quantity delivered will fit in the tank. *- dip stick.*
6. The designated plant representative will confirm that the hookup is to the proper fill pipe and check valve positions as required.
7. The designated plant representative will then approve transfer of material.
8. The tank truck driver, as witnessed by the designated plant representative, will be responsible for the safe transfer of the material into the tank. The driver will remain with the truck during the transfer.
9. If the driver must leave the truck, he will discontinue the transfer operation.
10. The driver will immediately notify the designated plant representative should any spillage occur.
11. When delivery is complete, the driver will blow the fill lines clear into the tank. The designated plant representative will close fill line valves where applicable.
12. The driver will secure and inspect all discharge piping, drains and outlets for leakage.
13. The driver will then call the designated plant representative to check the fill pipe, confirm that the proper quantity of material has been delivered to the tank, and remove wheel blocks.
14. The driver will leave a delivery ticket with the designated plant representative.
15. The designated plant representative will complete a materials delivery inspection form or checklist for all delivery operations.

Note: After every satisfactory transfer, the designated plant representative must open storm drain valve.

APPENDIX B

SPILL INSPECTION AND MATERIALS DELIVERY FORMS

GO-JO INDUSTRIES
CONTAINMENT AREA
QUARTERLY INSPECTION REPORT

Location _____ Date _____

Inspector _____

Signature of Spill Control Coordinator _____

Date _____

ITEM	SAT.	UNSAT.	REMARKS	DATE OF REPAIRS	INITIALS OF REPAIRMAN
Absorbent Supply Available					
Hand Tools & Materials Required to Contain Spill Readily Available					
Blocks for truck wheels on hand					
Personnel Instructed of Changes in Pollution Laws					
Condition of Unloading and Containment Area					
Storage Tank Condition					
Transfer Pumps					
Transfer Lines and Valves					
Storm Drain Valves					
Other:					

GO-JO INDUSTRIES

DAILY CONTAINMENT AREA INSPECTION

Location _____ Date _____

Inspector _____

ITEM	SAT.	UNSAT.	REMARKS	DATE OF REPAIRS	INITIALS OF REPAIRMAN
General Storage and Containment Conditions					
Cleanup Materials on Hand					
Evidence of Spills and Leakage					
Contained Storm* Runoff Uncontaminated					
Other:					

*If satisfactory, drain containment and resecure valve. If unsatisfactory, initiate Internal Spill Alert.

GO-JO INDUSTRIES

TANK TRUCK UNLOADING CHECK LIST

LOCATION _____

DATE _____ TIME _____

INSPECTOR _____

1. Wheel Chocks in Place _____
2. Material Delivered _____
3. Storage Tank Used # _____
4. Available Tank Volume _____
5. Fill Line Used # _____
6. Hose Connections Secure _____
7. Storm Drain Valve Closed _____
8. Fill Line Valve Open _____
9. Fill Line Blown Clear After Transfer _____
10. Fill Line Valve Secured _____
11. Storage Tank Status _____
12. Volume Delivered _____
13. Spills, Leaks _____
14. Wheel Chocks Removed _____
15. Remarks _____

GO-JO INDUSTRIES SPILL REPORT

Spill Control Coordinator _____
Signature

Date _____ Time _____

Location _____

Persons and/or Agencies Notified:

Material Spilled

Estimate of Quantity

Reason for Spill

Were spill prevention procedures followed ? _____

Did spill get into any sewer ? _____

Clean up methods used: _____

Corrective action recommended: _____

APPENDIX C

SPCC PLAN CERTIFICATION

SPCC PLAN CERTIFICATION

1. Name of Facility: Go-Jo Industries, Inc.
2. Type of Facility: Hand Cleaner and Body Filler Manufacturing
3. Location of Facility: 3783 Akron-Cleveland Road
Cuyahoga Falls, Ohio 44223
4. Designated person accountable for oil spill prevention at facility:

(see Section 5.0 for complete listing)

Business Phone: (216) 920-8100

MANAGEMENT APPROVAL

This SPCC Plan will be implemented as herein described.

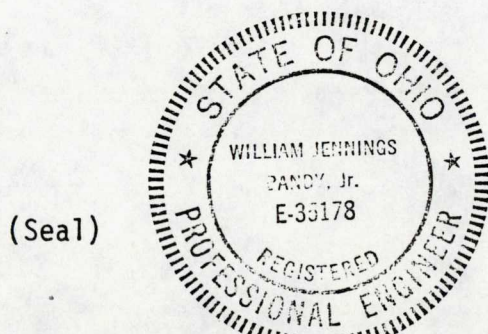
Signature: Robert V. Schald 5/1/81

Name _____

Title Director of Operations

CERTIFICATION

I hereby certify that I have examined the facility, and being familiar with the provisions of 40 CFR, Part 112, attest that this SPCC Plan has been prepared in accordance with good engineering practices.



William J. Bandy, Jr., P.E.
Printed Name of Registered
Professional Engineer

Will J. Bandy, Jr.
Signature of Registered
Professional Engineer

DATE 4-23-81 Registration No. 35178 State OHIO